

# Contents of *Aquaculture*, Volume 91

VOL. 91 NOS. 1/2

1 DECEMBER 1990

## Diseases, Parasites and Predators

- Occurrence of luminous bacterial disease of *Penaeus monodon* larvae in the Philippines  
C.R. Lavilla-Pitogo, M.C.L. Baticados, E.R. Cruz-Lacierda and L.D. de la Pena  
(Iloilo, Philippines) ..... 1
- Mebendazole treatment against *Pseudodactylogyrus* infections in eel (*Anguilla anguilla*)  
S. Møllergaard (Frederiksberg, Denmark) ..... 15

## Husbandry and Management

- Factors affecting survival of rotifers (*Brachionus plicatilis* O.F. Müller) at 4°C  
E. Lubzens, G. Kolodny, B. Perry (Haifa, Israel), N. Galai, R. Sheshinski and Y.  
Wax (Jerusalem, Israel) ..... 23
- Energy budget of a *Mytilus edulis* L. population during its first year on bouchots in the  
bay of Marennes-Oléron  
J.M. Deslous-Paoli (Sète, France), S. Boromthananarat (Songkla, Thailand), M. Héral  
(La Tremblade, France), W. Boromthananarat (Songkla, Thailand) and D. Razet (La  
Tremblade, France) ..... 49
- The effects of salinity on the survival and growth of juvenile *Cichlasoma urophthalmus*  
C.A. Martinez-Palacios (Merida, Mexico), L.G. Ross (Stirling, Great Britain) and  
M. Rosado-Vallado (Merida, Mexico) ..... 65
- Weaning of wild-caught common wolffish (*Anarhichas lupus*) larvae  
E. Moksness (His, Norway) ..... 77
- Stochastic model of carp fingerling growth  
M.A. Szumiec (Chybie, Poland) ..... 87

## Nutrition

- Development of dry food for larvae of *Coregonus lavaretus* L. I. Growth, food digestion  
and fat absorption  
R. Rösch (Langenargen, Federal Republic of Germany) and H. Segner (Karlsruhe,  
Federal Republic of Germany) ..... 101
- Development of dry food for larvae of *Coregonus lavaretus* L. II. Liver histology  
H. Segner (Karlsruhe, Federal Republic of Germany) and R. Rösch (Langenargen,  
Federal Republic of Germany) ..... 117
- The effect of dietary (*n-3*) polyunsaturated fatty acids on growth, survival and swim  
bladder development in *Sparus aurata* larvae  
W.M. Koven, A. Tandler, G. Wm. Kissil (Eilat, Israel), D. Sklan (Rehovot, Israel),  
O. Friezlander and M. Harel (Eilat, Israel) ..... 131
- Influence of varying energy levels with two protein concentrations in diets for hybrid  
tilapia (*Oreochromis niloticus* × *O. aureus*) reared in seawater  
S.-Y. Shiau and S.-L. Huang (Keelung, Taiwan) ..... 143
- Response to carotenoids by rainbow trout in the sea: resorption and metabolism of  
dietary astaxanthin and canthaxanthin  
B. Bjerkeng (Trondheim, Norway), T. Storebakken (Sunndalsøra, Norway) and S.  
Liaaen-Jensen (Trondheim, Norway) ..... 153

**Physiology and Endocrinology**

- Binding of soybean agglutinin to small intestinal brush border membranes and brush border membrane enzyme activities in Atlantic salmon (*Salmo salar*)  
H.G.C.J.M. Hendriks, T.S.G.A.M. van den Ingh (Utrecht, Netherlands), Å. Krogdahl, J. Olli (Ås, Norway) and J.F.J.G. Koninkx (Utrecht, Netherlands) ..... 163
- Annual and daily variations of plasma cortisol in sea bass, *Dicentrarchus labrax* L.  
J. Planas, J. Gutierrez, J. Fernandez (Barcelona, Spain), M. Carrillo (Castellón, Spain) and P. Canals (Barcelona, Spain) ..... 171
- Annual cycle of gonadal histology and steroid profiles in the juvenile males and adult females of the protandrous black porgy, *Acanthopagrus schlegeli*  
C.-F. Chang and W.-S. Yueh (Keelung, Taiwan) ..... 179

**Short Communication**

- Growth acceleration of coho salmon (*Oncorhynchus kisutch*) following oral administration of recombinant bovine somatotropin  
E. McLean, E.M. Donaldson, H.M. Dye (West Vancouver, B.C., Canada) and L.M. Souza (Thousand Oaks, CA, USA) ..... 197

**VOL. 91 NOS. 3/4****15 DECEMBER 1990****Diseases, Parasites and Predators**

- Effect of oxolinic acid on bacterial flora and hatching success rate of rainbow trout, *Oncorhynchus mykiss*, eggs  
G.A. Barker, S.N. Smith (Birmingham, Great Britain) and N.R. Bromage (Stirling, Great Britain) ..... 205

**Economics and Marketing**

- Economic feasibility analysis of the monoculture of mudcrab (*Scylla serrata*) Forsskal  
R.F. Agbayani, D.D. Baliao, G.P.B. Samonte, R.E. Tumaliuan and R.D. Caturao (Iloilo City, Philippines) ..... 223

**Husbandry and Management**

- The effect of manure application rate and frequency upon fish yield in integrated fish farm ponds  
Y. Zhu, Y. Yang, J. Wan, D. Hua (Wuxi, China) and J.A. Mathias (Winnipeg, Man., Canada) ..... 233
- Growth characteristics and relationships among body length, body weight and tail weight of *Penaeus monodon* from a culture environment in Taiwan  
C.S. Cheng (Tung Kang, Taiwan) and L. Chen (San Diego, CA, USA) ..... 253
- Acute and chronic toxicity of ammonia to juvenile *Metapenaeus macleayi* and *Penaeus monodon* and the influence of low dissolved-oxygen levels  
G.L. Allan, G.B. Maguire and S.J. Hopkins (Salamander Bay, N.S.W., Australia) ..... 265
- Factors affecting intensive larval rearing of striped mullet, *Mugil cephalus*  
H. Eda, R. Murashige (Honolulu, HI, USA), Y. Oozeki (Miyagi, Japan), A. Hagiwara (Nagasaki, Japan), B. Eastham, P. Bass, C.S. Tamaru and C.-S. Lee (Honolulu, HI, USA) ..... 281
- The influence of maternal age and delayed initial feeding on the survival and growth of previously unfed *O. niloticus* (L.) and *O. mossambicus* (Peters) fry  
K.J. Rana (Stirling, Great Britain) ..... 295

**Nutrition**

- Effects of dietary  $\alpha$ -cellulose levels on the juvenile tilapia, *Oreochromis mossambicus* (Peters)  
O.B. Dioundick and D.I. Stom (Irkutsk, USSR)..... 311
- Requirement and utilization of ascorbic acid and ascorbic sulfate in juvenile rainbow trout  
K. Dabrowski, N. El-Fiky, G. Köck (Innsbruck, Austria), M. Frigg (Basel, Switzerland) and W. Wieser (Innsbruck, Austria)..... 317
- Lipid composition of fat trimmings from farm-raised alligator  
A. Peplow, M. Balaban and F. Leak (Gainesville, FL, USA) ..... 339

**Physiology and Endocrinology**

- Physiological stress in striped bass: effect of acclimation temperature  
K.B. Davis (Memphis, TN, USA) and N.C. Parker (Marion, AL, USA) ..... 349
- Plasma prolactin and cortisol concentrations during salinity challenges of coho salmon (*Oncorhynchus kisutch*) at smolt and post-smolt stages  
M. Avella (Corvallis, OR, USA), G. Young (Berkeley, CA, USA), P. Prunet (Rennes, France) and C.B. Schreck (Corvallis, OR, USA) ..... 359
- Effects of acute versus sustained administration of GnRH $\alpha$  on GtH release and ovulation in the rainbow trout, *Oncorhynchus mykiss*  
B. Breton, C. Weil, E. Sambroni (Rennes, France) and Y. Zohar (Eilat, Israel)..... 373

**Technical Paper**

- Cryopreservation of the euryhaline rotifer *Brachionus plicatilis* embryos  
J.D. Toledo (Iloilo City, Philippines) and H. Kurokura (Shizuoka, Japan) ..... 385

**Author Index**..... 395

**Contents of *Aquaculture*, Volume 91**..... 399

